IAP15 Rec'd PCT/PTO 05 JUL 2006

FORM PTO-1390 (REV . 07-2005)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

EXPRESS MAIL NUMBER

ATTORNEY'S DOCKET NUMBER

187857/US-479686-

| İ   | T              | RANSMITTAL LETTER TO  | EV 642 788 130 US                                 | 00018                      |                         |  |  |  |  |
|---|----------------|---|---|----------------------------|-------------------------|--|--|--|--|
| D)  | EŜIG           | NATED/ELECTED OFFICE  | U.S. APPLICATION NO. (if known, see 3             | CFR LS)                    |                         |  |  |  |  |
|   |                | SUBMISSION UNDE   | U.S. APPLICATION NO. ((Chaman, see 37.CFR.Ls) 6 8 |                            |                         |  |  |  |  |
| INT   | ERNA'          | TIONAL APPLICATION NO.  | INTERNATIONAL FILING DATE                         | PRIORITY DATE CLAIME       | D                       |  |  |  |  |
|   |                | PCT/EP2005/000041   | Januar  | y 5, 2004                  |                         |  |  |  |  |
| TITLE OF INVENTION                                |                |   |   |                            |                         |  |  |  |  |
| HIGH-FREQUENCY SPRAYING DEVICE                    |                |   |   |                            |                         |  |  |  |  |
| APPLICANT(S) FOR DO/EO/US                         |                |   |   |                            |                         |  |  |  |  |
| JÜRGEN KUNSTMANN, JÖRG RATHENOW and SOHEIL ASGARI |                |   |   |                            |                         |  |  |  |  |
| App   | licant         | herewith submits to the United  | States Designated/Elected Office (D               | O/EO/US) the following ite | ms and other            |  |  |  |  |
| 1.  | $\boxtimes$    | This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.  |   |                            |                         |  |  |  |  |
| 2.  |                | This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.   |   |                            |                         |  |  |  |  |
| 3.  | $\boxtimes$    | This express request to begin national examination procedures (35 U.S.C. 371(f). The submission must include items (5), (6), (9) and (21) indicated below.                                      |   |                            |                         |  |  |  |  |
| 4.  | $\boxtimes$    | The US has been elected (Arti   | cle 31).  |                            | ,                       |  |  |  |  |
| 5.  | $\boxtimes$    | A copy of the International Application as filed (35 U.S.C. 371(c)(2))  |   |                            |                         |  |  |  |  |
|   | a.             | is attached hereto (require   | red only if not communicated by the               | International Bureau).     |                         |  |  |  |  |
|   | b.             | has been transmitted by   | the International Bureau.                         |                            |                         |  |  |  |  |
|   | C.             | is not required, as the application was filed in the United States Receiving Office (RO/US).  |   |                            |                         |  |  |  |  |
| 6.  | $\boxtimes$    | An English translation of the International Application as filed (35 U.S.C. 371(c)(2)).   |   |                            |                         |  |  |  |  |
|   | a.             | is attached hereto.   |   |                            |                         |  |  |  |  |
|   | b.             | has been previously sub-  | mitted under 35 U.S.C. 154(d)(4).                 |                            |                         |  |  |  |  |
| 7.  | <b>⊠</b><br>a. | Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))  are attached hereto (required only if not transmitted by the International Bureau).       |   |                            |                         |  |  |  |  |
|   | b.             |   |   |                            |                         |  |  |  |  |
|   | c.             |   |   |                            |                         |  |  |  |  |
|   | d.             | have not been made and will not be made.  |   |                            |                         |  |  |  |  |
| 8.  |                | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).   |   |                            |                         |  |  |  |  |
| 9.  |                | An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).  |   |                            |                         |  |  |  |  |
| 10.   | $\boxtimes$    | An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36   |   |                            |                         |  |  |  |  |
| Iten  | ns 11 :        | to 20. below concern documer  | nt(s) or information included:                    |                            |                         |  |  |  |  |
| 11.   | $\boxtimes$    | An Information Disclosure St  | atement under 37 CFR 1.97 and 1.98                | 3.                         |                         |  |  |  |  |
| 12.   |                | An assignment document for a  | ecording. A separate cover sheet in c             | compliance with 37 CFR 3.2 | 28 and 3.31 is included |  |  |  |  |
| 13.   | $\boxtimes$    | A preliminary amendment.  |   |                            |                         |  |  |  |  |
| 14.   |                | An Application Data Sheet under 37 CFR 1.76.  |   |                            |                         |  |  |  |  |
| 15.   | $\boxtimes$    | A substitute specification.   |   |                            |                         |  |  |  |  |
| 16.   |                | A power of attorney and/or change of address letter.  |   |                            |                         |  |  |  |  |
| 17.   |                | A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 – 1.825  |   |                            |                         |  |  |  |  |
| 18.   |                | A second copy of the published international application under 35 U.S.C. 154(d)(4)  |   |                            |                         |  |  |  |  |
| 19.   |                | A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).   |   |                            |                         |  |  |  |  |
| 20.   | $\boxtimes$    |   |   |                            |                         |  |  |  |  |
|   | _              |   | •   | ·                          | PCT Preliminary         |  |  |  |  |
|   |                | International Search Report, Written Opinion, English language translation of the PCT application, PCT Preliminary Examination Report, Redline comparison document, and Return Receipt Postcard |   |                            |                         |  |  |  |  |

AP20 Reold PCT/PTO 0 5 JUL 2006

| U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.5) INTERNATIONAL APPLICATION NO.   |                                       |          | ATTORNEY'S DOCKET<br>NUMBER |                        |       |              |                        |                 |
|---|---------------------------------------|----------|-----------------------------|------------------------|-------|--------------|------------------------|-----------------|
| 10/50   | 10 /15 Pasis Feek Q PCT/EP2005/000041 |          |                             | 187857/US-479686-00018 |       |              |                        |                 |
| 21. The following fees have   | e been submitted                      | :        |                             |                        |       | <del>-</del> | CALCULATIONS           | PTO USE<br>ONLY |
|   | fee (37 CFR 1.49                      | 92(a))   |                             |                        |       | \$300.00     | \$ 300                 |                 |
| 22.   |                                       |          |                             |                        |       |              |                        | -               |
| If the written opinion prepared by ISA/US or the international preliminary  |                                       |          |                             |                        |       |              |                        |                 |
| examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$0.00  |                                       |          |                             |                        |       |              |                        |                 |
| All other situations. \$200.00  |                                       |          |                             |                        |       |              | \$ 200                 |                 |
| 23. Search fee (37 CFR 1.492(b))  |                                       |          |                             |                        |       |              |                        |                 |
| If the written opinion of the ISA/US or US or the international preliminary   |                                       |          |                             |                        |       |              |                        |                 |
| examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)(4) \$0.00   |                                       |          |                             |                        |       |              |                        |                 |
| Search fee (37 CFR 1.445(a)(2   | • • • • •                             | n the in | iternational applicat       | tion to                | )     | Ψοιου        |                        |                 |
| the USPTO as an Internat  | ional Searching A                     | uthorit  | y                           |                        |       | \$100.00     |                        |                 |
| International Search Report pr  | •                                     |          |                             |                        |       | \$400.00     |                        |                 |
| All other situations \$500.00   |                                       |          |                             |                        |       |              | \$ 400                 |                 |
| TOTAL OF 21, 22 and 23 =  |                                       |          |                             |                        |       |              | \$ 900                 |                 |
| Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. |                                       |          |                             |                        |       |              |                        |                 |
|   |                                       |          |                             |                        | RATE  |              |                        |                 |
| - 100 /5  | 0 =                                   |          |                             |                        | x \$2 | 250.00       |                        |                 |
| Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).  |                                       |          |                             |                        |       |              | \$                     |                 |
| CLAIMS NUN  | MBER FILED                            | NUN      | MBER EXTRA                  |                        | R     | ATE          |                        |                 |
| Total claims  | 21-20 =                               |          | 1                           |                        | x     | \$50.00      | \$50                   |                 |
| Independent claims  | 1 -3 =                                |          | 0                           | :                      | x     | \$200.00     | \$ 0                   |                 |
| MULTIPLE DEPENDENT C  | LAIM(S) (if appli                     |          |                             |                        | +     | \$360.00     | \$                     |                 |
| TOTAL OF ABOVE CALCULATIONS =   |                                       |          |                             |                        |       |              |                        |                 |
| Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.   |                                       |          |                             |                        |       |              | \$                     |                 |
| SUBTOTAL =  |                                       |          |                             |                        |       |              | \$950                  |                 |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).   |                                       |          |                             |                        |       |              | \$                     |                 |
| TOTAL NATIONAL FEE =  |                                       |          |                             |                        |       | \$ 950       |                        |                 |
| Fee for recording the enclose assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +   |                                       |          |                             |                        |       | \$           |                        |                 |
| TOTAL FEES ENCLOSED =   |                                       |          |                             |                        |       | \$950        |                        |                 |
|   |                                       |          |                             |                        |       |              | Amount to be refunded: | \$              |
| EODM DTO 1300 (DEV. 7.2005)   |                                       |          | Page 2 of 2                 |                        |       |              | charged:               | \$              |

JAP20 Rec'd PCT/PTO 0 5 JUL 2006

| U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 1.5)  | INTERNATIONAL APPLICATION NO.        | ATTORNEY'S DOCKET<br>NUMBER |  |  |  |  |  |  |
|--|--------------------------------------|-----------------------------|--|--|--|--|--|--|
| 10 /5.855.68   | PCT/EP2005/000041                    | 187857/US-479686-00018      |  |  |  |  |  |  |
| a. A check in the amount \$950   | to cover the above fees is enclosed. |                             |  |  |  |  |  |  |
| b. Please charge my Deposit Account No. 50-2054 in the amount of \$ to cover the above fees.  A duplicate copy of this sheet is enclosed.  |                                      |                             |  |  |  |  |  |  |
| The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2054 A duplicate coy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. |                                      |                             |  |  |  |  |  |  |
| NOTE: Where an appropriate time limit under 37 CFR 1.494 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO: CUSTOMER NUMBER 30873  |                                      |                             |  |  |  |  |  |  |
| Dorsey & Whitney LLP   |                                      |                             |  |  |  |  |  |  |
| Intellectual Property Department   | gnature                              |                             |  |  |  |  |  |  |
| 250 Park Avenue New York, New York 10177 St  | even P. Marsh, Esq.                  | July 5, 2006                |  |  |  |  |  |  |
| Na   | Name                                 |                             |  |  |  |  |  |  |
| 53   | 53,271                               |                             |  |  |  |  |  |  |
| Re   | Registration Number                  |                             |  |  |  |  |  |  |
| FORM PTO-1390 (REV. 7-2005)  | Page 3 of 3                          |                             |  |  |  |  |  |  |

4811-9854-3617\1

PCT/EP2005/000041 WO 2005/065843 **BLUE MEMBRANES GMBH**  25. Oktober 2005

## Neue Ansprüche

- 1. Hochfrequenzzerstäubungsvorrichtung zum Zerstäuben einer Beschichtungsflüssigkeit und zum anschließenden Beschichten eines Substrats (14), mit
  - einer zu hochfrequenten Schwingungen anregbaren Zerstäubungseinheit (1), die die ihr zugeführte Beschichtungsflüssigkeit zu einem Sprühnebel zerstäubt,
  - einem positionierbaren Substrathalter (8, 9), der das zu beschichtende Substrat (14) ständig in einer für die Beschichtung günstigen Position innerhalb des Sprühnebels hält, wodurch das Substrat (14) mit dem Sprühnebel benetzt wird, und
  - mindestens einer Trocknungsvorrichtung (6), die die so auf dem Substrat (14)

gebildete Sprühnebelschicht trocknet; Stompeten formigen, wobei die Zerstäubungseinheit (1) einen Resonanzkörper (2) aufweist und wobei die Zerstäubungseinheit (1) von einem einseitig geöffneten Gehäuse (16) umhaust ist, wobei der Resonanzkörper (2) im Bereich der Öffnung des Gehäuses angeordnet ist;

wobei das Gehäuse (16) eine steuerbare Luft- oder Gaszufuhr (31) aufweist; wobei die Luft- oder Gaszufuhr (31) als Inertgaszufuhr (31) ausgebildet ist, zur Zuführung von Inertgas zu dem Gehäuse;

wobei die eine Öffnung des Gehäuses (16) eine Inertgasdüse (3) aufweist, durch die das über die Inertgaszufuhr (31) bereitgestellte Inertgas als Trägermedium zur Sprühstrahlkonditionierung des Sprühnebels entströmt.

2. Vorrichtung gemäß Anspruch 1, dadurch gekennzeichnet, dass die Zerstäubungseinheit (1) relativ zum Substrat (14) bewegbar ist.

NH:bm

10/585568

■ MAIWALD PATENTANWALTS <u>G</u>N

New York

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Rechtsanwälte

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Aktenzeichen PCT/EP2005/000041 WO 2005/065843 **BLUE MEMBRANES GMBH** 

Europäisches Patentamt

80298 München

Unser Zeichen B 7747 / NH München, 19. Dezember 2005

Bezugnehmend auf das Telefonat vom 16. Dezember 2005 mit dem zuständigen Prüfer wird anbei zum Satz neuer Ansprüche vom 25. Oktober 2005 eine Austauschseite 1 eingereicht, in welcher im Anspruch 1 das Merkmal des "trompetenförmigen" Resonanzkörpers aus dem ursprünglichen Anspruch 9 aufgenommen wurde. Es wird diesseitig davon ausgegangen, dass nunmehr alle Beanstandungen aus dem schriftlichen Vorbescheid überwunden wurden. Es wird daher um Ausstellung eines entsprechend positiven internationalen vorläufigen Prüfungsbescheides gebeten.

> Maiwald Patentanwalts GmbH (Norbert Hansen)

Anlagen

Geänderter Anspruch 1

NH:bm

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Parr · Tauche · Leutheusser-Schnarrenberger Rechtsanwälle (München · Starnberg)

Maiwald Inc., European IP Services, New York, Dipl.-Ing. Korbinian Kopf, M.A., U.S. Patent Agent